E1 Cancelled

binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK$_{cs}$/Ku or XRCC4, DNA ligase IV and DNA-PK$_{cs}$/Ku.

E2 Q1 E2

3. (amended) A method for identifying a compound X which inhibits DNA ligase IV activity, the method including the steps of:

(i) contacting DNA ligase IV, XRCC4 and compound X; and

(ii) determining DNA ligase activity in the presence and the absence of compound X, a decrease in the activity in the presence relative to the absence of compound X being indicative that compound X inhibits the activity of DNA ligase IV.

E3 Q1 E3

6. (amended) A method comprising

(i) contacting a compound X, DNA-PKcs/Ku and XRCC4; and

(ii) determining phosphorylation of said XRCC4 in the presence and absence of [test] compound X;

a decrease in phosphorylation in the presence relative to the absence of compound X being indicative that compound X inhibits the phosphorylation of XRCC4 by DNA-PK$_{cs}$/Ku.

E4 Q1 E4

19. (amended) A method comprising obtaining a compound X which inhibits the binding between XRCC4 and DNA ligase IV, or XRCC4 and DNA-PK$_{cs}$/Ku, or XRCC4 and DNA ligase IV and DNA-PK$_{cs}$/Ku, employing a method according to claim 1; and, formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

E5 Q1 E5

22. (amended) A method comprising obtaining a compound X which inhibits DNA ligase IV activity employing a method according to claim 3 and formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

E6 Q1 E6

25. (amended) A method comprising obtaining a compound X which inhibits DNA-PKcs/Ku phosphorylation of XRCC4 employing a method according to claim 6 and formulating said compound X into a composition which comprises a pharmaceutically acceptable excipient.

REMARKS

Claims 1, 3, and 6-28 ar pending after entry of the amendments set forth herein. Claims 1, 3, 6, 19, 22 and 25 have been amended. Claims 2 and 4 are cancel d, without